

REPORT NUMBER: ITL88317-GONIOPHOTOMETRY

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ISSUE DATE: 09/22/16

PREPARED FOR: B-K LIGHTING, INC.

CATALOG NUMBER: AP-LED-x51-FL-12-C

LUMINAIRE: MACHINED BLACK PAINTED METAL WALL MOUNTING BRACKET AND HOUSING WITH DIFFUSE CIRCUIT BOARD MOUNTING BASE, 1 CIRCUIT BOARD WITH 1 LED, MOLDED WHITE PLASTIC LED SURROUND/REFLECTOR MOUNTING BASE, MOLDED MULTI-FACETED TIERED WHITE PLASTIC REFLECTOR WITH TEXTURED SEMI-SPECULAR FINISH, CLEAR MICRO-PRISMATIC FLAT GLASS LENS IN MACHINED BLACK PAINTED CYLINDRICAL METAL FRAME WITH UNFINISHED INTERIOR. LENS PRISMS OUT.

LAMP: ONE WHITE MULTI-CHIP LIGHT EMITTING DIODE (LED), VERTICAL BASE-UP POSITION.

INPUT ELECTRICAL: 120.0 VOLTS, 57.8 WATTS, 0.484 AMPS

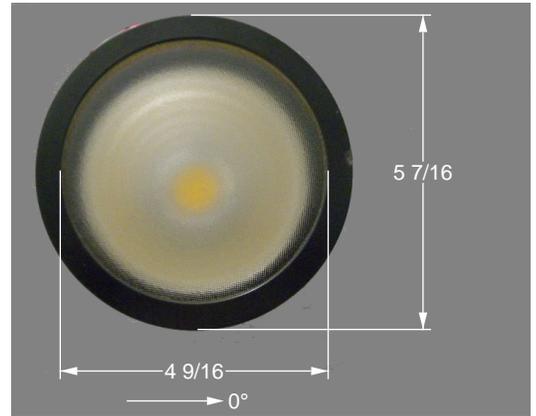
MOUNTING: WALL

LED DRIVER: THOMAS RESEARCH PRODUCTS PLED75W-054-C1400-D, DRIVER HAS MULTIPLE LEADS, ONLY LINE INPUT AND LED OUTPUT LEADS CONNECTED FOR THIS TEST.

NOTE: DATA SHOWN IS ABSOLUTE FOR THE SAMPLE PROVIDED AT RATED INPUT VOLTAGE (120VAC, 60Hz) TO THE DRIVER.

TEST PROCEDURE: IESNA LM-79-08

TEST DISTANCE = 20.0 FEET



DEG	CANDELA	LUMENS
0	7790	
5	7504	691
15	5493	1512
25	2470	1135
35	637	423
45	212	172
55	80	75
65	37	38
75	18	19
85	5	6
90	0	

ZONAL ZONE	LUMEN SUMMARY LUMENS	%FIXT
0- 30	3339	82.0
0- 40	3762	92.4
0- 60	4008	98.5
0- 90	4071	100.0
90-180	0	0.0
0-180	4071	100.0

EFFICACY = 70.4 lm/W

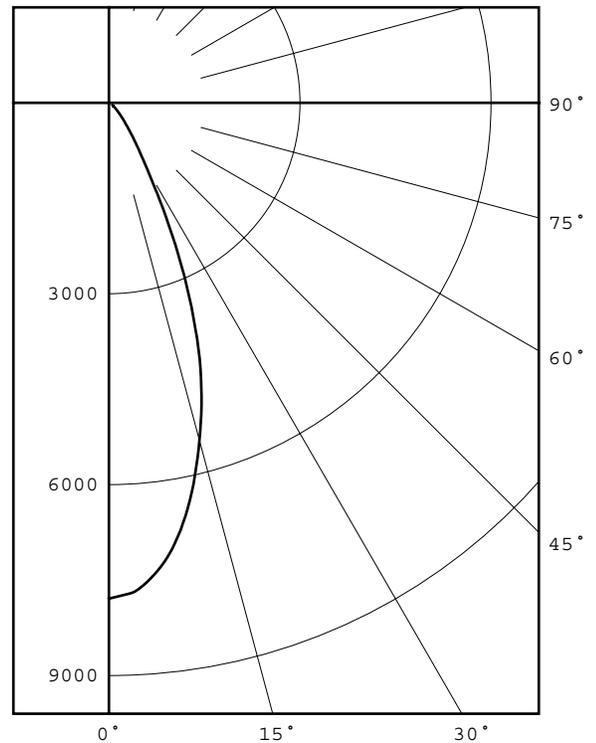
CIE TYPE - DIRECT

LUMINAIRE SPACING CRITERION = 0.65

BEAM ANGLE (50%) : 41.3 DEGREES

FIELD ANGLE (10%) : 66.8 DEGREES

LUMINOUS DIAMETER: 4.562



LUMINANCE DATA IN CANDELA/SQ M

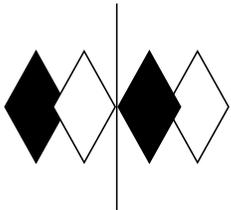
ANGLE AVERAGE

IN DEG

45	28424.
55	13223.
65	8300.
75	6593.
85	5439.

Checked J. VILLANUEVA

Approved R. BEATTIE
Lighting Engineer



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INDEPENDENT TESTING LABORATORIES, INC.
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CANDELA DISTRIBUTION

0.0	7790
2.5	7717
5.0	7504
7.5	7171
10.0	6706
12.5	6135
15.0	5493
17.5	4834
20.0	4108
22.5	3292
25.0	2470
27.5	1744
30.0	1199
32.5	857
35.0	637
37.5	480
40.0	365
42.5	278
45.0	212
47.5	164
50.0	128
52.5	101
55.0	80
57.5	65
60.0	53
62.5	44
65.0	37
67.5	31
70.0	27
72.5	22
75.0	18
77.5	14
80.0	11
82.5	8
85.0	5
87.5	2
90.0	0



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5-DEGREE
ZONAL LUMEN SUMMARY

0- 5	183
5- 10	508
10- 15	722
15- 20	790
20- 25	686
25- 30	449
30- 35	260
35- 40	163
40- 45	105
45- 50	67
50- 55	44
55- 60	30
60- 65	22
65- 70	16
70- 75	12
75- 80	8
80- 85	4
85- 90	1

10-DEGREE
ZONAL LUMEN SUMMARY

0- 10	691
0- 20	2203
0- 30	3339
0- 40	3762
0- 50	3933
0- 60	4008
0- 70	4046
0- 80	4065
0- 90	4071



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COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE 0.20

RC	80				70				50			30			10			0	
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	111	106	106	106	102	102	102	100
1	114	111	109	107	111	109	107	105	105	103	102	101	100	99	98	97	96	96	94
2	109	104	100	97	107	102	99	96	99	96	94	96	94	92	94	92	90	89	89
3	104	98	93	90	102	97	92	89	94	90	88	92	89	86	89	87	85	83	83
4	99	92	87	83	98	91	87	83	89	85	82	87	84	81	85	83	80	79	79
5	95	87	82	78	93	87	82	78	85	80	77	83	79	76	82	78	76	74	74
6	91	83	78	74	90	82	77	73	81	76	73	79	75	72	78	75	72	71	71
7	87	79	73	70	86	78	73	69	77	72	69	76	72	69	75	71	68	67	67
8	84	75	70	66	83	75	69	66	74	69	66	73	68	65	72	68	65	64	64
9	80	72	66	63	79	71	66	63	70	66	63	70	65	62	69	65	62	61	61
10	77	69	63	60	76	68	63	60	67	63	60	67	63	60	66	62	59	58	58

ALL CANDELA, LUMENS, LUMINANCE, AND VCP VALUES IN THIS REPORT ARE BASED ON ABSOLUTE PHOTOMETRY. THE COEFFICIENT OF UTILIZATION VALUES ARE BASED ON THE TOTAL ABSOLUTE LUMEN OUTPUT OF THIS TEST SAMPLE.

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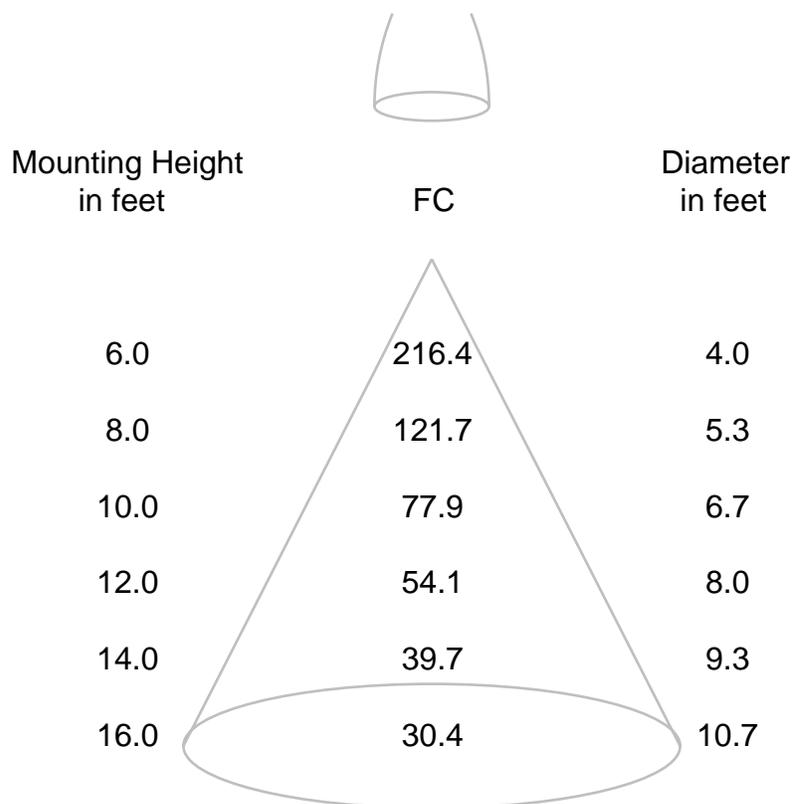
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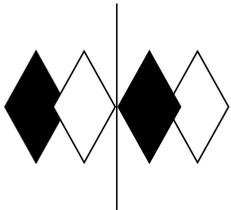
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CONE OF LIGHT DIAGRAM

(diameter shown is where fc value is half the fc at nadir)





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NVLAP LAB CODE: 200925-0

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